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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,275	07/18/2006	Klaus Kruckenhauser	1739-0183PUS1	5881

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EXAMINER

MILLER, SAMANTHA A

ART UNIT	PAPER NUMBER
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3749

NOTIFICATION DATE	DELIVERY MODE
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08/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/580,275	Applicant(s) KRUCKENHAUSER ET AL.	
	Examiner SAMANTHA A. MILLER	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/18/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 1-13 and 23-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected 14-22, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/29/2010.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A range **preferably less** than 30 mm, **in particular less** than 10 mm but greater than 0.5 mm, and **with particular preference** between 1 mm and 5 mm is unclear what the range is, for the purpose of the rejection the range will be interpreted as less than 50mm.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by RUCKL (5,386,097).

RUCKL teaches:

1. A hood (15), which in its operating position covers a region of interaction between the radiation and the workpiece surface, with a rear side (rear most wall of 37/38), to which a vacuum extraction line (connected to 38) can be connected, two side walls (side walls of 28 and 29 shown in Fig.10), which have end edges (inner curved edge of 28, Fig.9) which lie opposite the workpiece in the operating position of the hood, and two directing walls (upper end wall of 37 and outer end wall of 28), which are located between the side walls (Fig.10), extend transversely in relation to the latter and which together with the two side walls delimit in the hood a vacuum extraction channel (37) with an inlet opening (22), which lies opposite the workpiece (8) in the operating position of the hood, an edge (an edge of inner wall of 28 to upper end of 37) of one of the two directing walls lying opposite the workpiece (8) in the operating position of the hood, while the other directing wall (outer end wall of 28) has a convex, cylindrical curvature lying opposite the workpiece surface in the operating position of the hood and, in the region of this curvature (Fig.9), at least one opening (that 8 is put in 29 and 28), through which the radiation for processing the workpiece surface is guided.

2. The end edges of the two side walls (side walls of 28 and 29 shown in Fig.10) have a contour which is adapted to the contour (shown in Fig.9) of the surface of a workpiece (8) to be processed, so that corresponding gap seals are formed when the end edges lie opposite the workpiece in the operating position of the hood (Fig.9).

3. The curvature of the curved directing wall (upper end wall of 37 and outer end wall of 28) is curved in the form of an arc of a circle (Fig.9).

4. The curving of the curvature of the curved directing wall is greater than the curving of the surface of the workpiece (being that the curved directing wall is a larger circumference than the workpiece being outer, Fig.9).

5. The curvature of the curved directing wall is exponentially curved (going across the upper surface of 37, Fig.9).

6. The opening or openings (opening that 8 goes through between 28 and 29) through which the radiation for processing the workpiece (8) is guided is provided in the region of the curved directing wall (upper end wall of 37 and outer end wall of 28) that lies closest to the surface of the workpiece (8) in the operating position of the hood (15).

7. The contour of the end edges (inner edge of 28 and 29) of the side walls (side walls of 28 and 29, shown in Fig.10) is a polyline adapted to the contour of the workpiece surface (Fig.9).

8. The contour of the end edges of the side walls is an arc of a circle adapted to the contour of the workpiece surface (Fig.9).

9. The distance between the end edges of the side walls and the workpiece surface in the operating position of the hood (the gap) is less than 50 mm, preferably

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less than 30 mm, in particular less than 10 mm but greater than 0.5 mm, and with particular preference between 1 mm and 5 mm (is less than a few tenths of a millimeter, col.11 ll.25-29, which meets the requirement of less than 50mm).

10. The width of the gap seals formed between the end edges of the side walls and the workpiece surface (gap) lies in the range between 0.1 mm and 30 mm (is less than a few tenths of a millimeter, col.11 ll.25-29).

11. The hood is exchangeably fastened to a working laser head (27).

12. The side walls of the hood are provided with means, in particular movable lamellae or exchangeable side parts, by which the contour of the edges of the side walls that lie opposite a workpiece can be changed in order to adapt them to the surface of the workpiece (Fig.9)

13. The region of the curved directing wall that lies closest to the surface of the workpiece in the operating position of the hood, each working jet or beam delivered by a processing head, in particular each working laser beam delivered by a working laser head (27), is provided with an opening of its own, through which the radiation for processing the workpiece is focused on the latter (Fig.9).

23. The curvature of the curved directing wall is curved in the form of an arc of a circle (Fig.9).

24. The curvature of the curved directing wall is exponentially curved (Fig.9).

25. The curving of the curvature of the curved directing wall is greater than the curving of the surface of the workpiece (being that the curved directing wall is a larger circumference than the workpiece being outer, Fig.9).

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26. The distance between the end edges of the side walls and the workpiece surface in the operating position of the hood (the gap) is less than 50 mm, preferably less than 30 mm, in particular less than 10 mm but greater than 0.5 mm, and with particular preference between 1 mm and 5 mm (is less than a few tenths of a millimeter, col.11 ll.25-29).

27. The distance between the end edges of the side walls and the workpiece surface in the operating position of the hood is less than 50 mm, preferably less than 30 mm, in particular less than 10 mm but greater than 0.5 mm, and with particular preference between 1 mm and 5 mm (is less than a few tenths of a millimeter, col.11 ll.25-29).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272-9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller
Examiner
Art Unit 3749
7/30/2010

/Steven B. McAllister/
Supervisory Patent Examiner, Art Unit 3749